Diagnosing and managing delirium in the elderly

David K. Conn, MB, FRCPC Susan Lieff, MD, FRCPC

abstract

OBJECTIVE To outline current approaches to diagnosing and managing delirium in the elderly.

QUALITY OF EVIDENCE A literature review was based on a MEDLINE search (1966 to 1998). Selected articles were reviewed and used as the basis for discussion of diagnosis and etiology. We planned to include all published randomized controlled trials regarding management but found only two. Consequently, we also used review articles and recent practice guidelines for delirium published by the American Psychiatric Association.

MAIN FINDINGS Clinical diagnosis of delirium can be aided by using DSM-IV criteria, the Delirium Symptom Interview, or the confusion assessment method. Management must include investigation and treatment of underlying causes and general supportive measures. Providing optimal levels of stimulation, re-orienting patients, education, and supporting families are important. Pharmacologic management of delirium should be considered only for specific symptoms or behaviours, eg, aggression, severe agitation, or psychosis. Only one randomized controlled trial of tranquilizer use for delirium in medically ill people has been published. Findings support the current belief that neuroleptics are superior to benzodiazepines in most cases of delirium. Most authorities still consider haloperidol the neuroleptic of choice. Controlled trials of the new atypical neuroleptics for treating delirium are not yet available. Benzodiazepines with relatively short half-lives, such as lorazepam, are the drugs of choice for withdrawal symptoms.

CONCLUSION Delirium is frequently underdiagnosed in clinical practice. It should be suspected with acute changes in behaviour. Careful investigation of the underlying cause permits appropriate management.

résumé

OBJECTIF Présenter les approches courantes à l'endroit du diagnostic et de la prise en charge du délire chez les personnes âgées.

QUALITÉ DES DONNÉES Une évaluation critique des ouvrages scientifiques s'est fondée sur une recension dans MEDLINE (1966 à 1998). Les articles choisis ont fait l'objet d'une analyse et ont servi de fondement à la discussion sur le diagnostic et l'étiologie. Nous prévoyions inclure tous les essais aléatoires contrôlés publiés concernant la prise en charge, mais deux seulement ont été trouvés. Par conséquent, nous avons aussi utilisé des articles critiques et les récents guides de pratique concernant le délire, publiés par l'American Psychiatric Association.

PRINCIPAUX RÉSULTATS Le diagnostic clinique du délire peut être facilité par le recours aux critères DSM-IV, à l'entrevue sur les symptômes du délire ou à la méthode d'évaluation de la confusion. La prise en charge doit inclure l'investigation et le traitement des causes sous-jacentes et des mesures générales de soutien. Il importe aussi d'offrir des degrés optimaux de stimulation, de réorienter les patients, de dispenser de l'éducation et de l'appui à la famille. La pharmacothérapie contre le délire ne devrait être envisagée que pour des symptômes ou des comportements précis, comme l'agressivité, une forte agitation ou la psychose. Un seul essai aléatoire contrôlé a été publié sur l'usage des tranquillisants pour le délire chez les personnes médicalement atteintes. Les conclusions sont favorables à la croyance actuelle que les neuroleptiques sont supérieurs aux benzodiazépines dans la plupart des cas de délire. La majorité des experts considèrent toujours l'halopéridol comme le neuroleptique d'élection. Les résultats d'essais contrôlés sur les nouveaux neuroleptiques atypiques pour le traitement du délire ne sont pas encore disponibles. Les benzodiazépines avec une demi-vie relativement courte, comme le lorazépam, sont les médicaments de premier choix pour les symptômes de sevrage.

CONCLUSION On omet souvent de diagnostiquer le délire dans la pratique clinique. Il devrait être suspecté lorsqu'il se produit des changements notoires dans le comportement. Une investigation approfondie des causes sous-jacentes permet sa prise en charge appropriée.

This article has been peer reviewed.

Cet article a fait l'objet d'une évaluation externe.

Can Fam Physician 2001;47:101-108.

← FOR PRESCRIBING INFORMATION SEE PAGE 203

This paper reviews current approaches to diagnosing and managing delirium in the elderly. Delirium has been a difficult condition to study, in part because of a lack of agreed-upon criteria until the DSM-III was published. As a result, few controlled trials of treatment have been conducted. The diagnostic criteria allowed for standardization of casefinding methods.

Prevalence of delirium in the elderly varies with clinical setting. Rates are lowest among community-dwelling elderly people (0.4% to 1.1%), in contrast to hospitalized elderly people (7% to 38.5%) or those seen in the emergency room (24%).[1-6] Levkoff and colleagues[1] noted that the rate of delirium among hospitalized patients was far greater among those admitted from long-term care than among those admitted from the community (64.9% versus 24.2%). Two *prospective* studies of the incidence of delirium in hospitalized elderly patients found rates of 7% and 18%.[5,7] Risk factors for delirium in this age group include pre-existing cognitive impairment, advanced age, and severity of comorbid illnesses.[3,8-13] This could explain in part the difference in rates of delirium in various settings.

Quality of evidence

A MEDLINE search (1966 to 1998) was carried out using MeSH headings "delirium," "elderly," "diagnosis," and "etiology." Recent review articles and articles selected on the basis of relevance of the title were used for the discussion of diagnosis and etiology. A second MEDLINE search using MeSH headings "delirium" and "treatment" with the subcategory "randomized controlled trial (RCT)" was carried out. The yield was five articles, but only two were RCTs. Only one of these studies examined pharmacologic interventions. Recent practice guidelines for delirium published by the American Psychiatric Association,[14] which contained an extensive literature review, confirmed the lack of published RCTs.

Diagnosis

Delirium is commonly underrecognized; up to 70% of cases are missed by physicians.[15] A popular misconception is that all delirious patients are hyperactive, hypervigilant, and hallucinating. While such symptoms can occur in the context of delirium, it is hypoactive or somnolent individuals who are usually undetected because they are seen as more cooperative or "just confused."

It is important to suspect delirium whenever elderly people have any acute changes in behaviour or cognition. It is important to carry out and document a mental status examination that not only focuses on patients' behaviour, thoughts, and perception, but also encompasses some basic tests of cognitive function. Diagnostic criteria for delirium according to DSM-IV are outlined in **Table 1**.[16] The Delirium Symptom Interview developed by Albert et al[17] divides these criteria into seven areas of enquiry: orientation, sleep disturbance, perceptual disturbance, speech disturbance, disturbance of consciousness, psychomotor activity, and observations.

Table 1. DSM-IV criteria for delirium

• Disturbance of consciousness (reduced clarity of awareness of the environment) with reduced ability to focus, sustain, or shift attention
• Change in cognition (such as memory deficit, distortion, language disturbance) or development of a perceptual disturbance that is not better accounted for by a pre-existing, established, or evolving dementia
• Disturbance develops over a short period (usually hours to days) and tends to fluctuate during the course of the day
• Evidence from the history, physical examination, or laboratory findings suggests that disturbance is caused by a medical condition, substance intoxication, or medication side effects

Adapted from the American Psychiatric Association's Diagnostic and statistical manual of mental disorders, *4th edition.*[16]

Orientation. Patients' knowledge of time, place, and person should be elicited with particular attention to details, such as the time of day and length of stay.

Sleep disturbance. Patients' sleep at night and during the day, as well as nightmares, are evaluated. Excessive sleeping during the day, restlessness at night, and vivid nightmares are positive findings.

Perceptual disturbance. Patients can experience auditory, visual, and tactile hallucinations. Unless specifically asked, they often do not volunteer misinterpretation of sounds, objects, people, or their intentions.

Speech disturbance. Patients' speech could be abnormal in its accuracy (words wrong or inappropriate), articulation (slurred), context (disjointed, limited, repetitive), volume, rate, or rhythm (halting, pressured).

Dr Conn *is Psychiatrist-in-Chief and* **Dr Lieff** *is Staff Psychiatrist at the Baycrest Centre for Geriatric Care. They are both Assistant Professors in the Department of Psychiatry at the University of Toronto.*

Disturbance of consciousness. Difficulties focusing, sustaining, or shifting attention can be evaluated by observing patients and by asking them to recite the months of the year or the days of the week backward. Another test of brief attention is to ask patients to repeat numbers forward and backward (average seven forward, five backward).

Psychomotor activity. Hyperactivity (restlessness, tremors, or picking) or hypoactivity (lethargy, staring into space) are important findings. Does patients' behaviour fluctuate? Are patients in restraints?

Observations. Affective disturbance, such as fear, anger, irritability, sadness, euphoria, or apathy, might be present. Patients sometimes demonstrate abnormal behaviour in the process of the interview. They could be inappropriately distracted, talk off topic, or have trouble keeping track of the interview. Recurring thoughts might intrude, or patients could be excessively absorbed with ordinary objects in the environment.

Case 1. Mrs B, an 86-year-old woman, was physically well, the primary caregiver to her demented husband, and managing independently before her initial hospitalization. She was referred for assessment by the rehabilitation unit to which she had been admitted to rule out depression, because of poor energy, little motivation, and decreased interest in the program. She had been hospitalized 4 weeks earlier after being hit by a car. She suffered a fracture of her left tibia and loss of consciousness, but neurologic workup results were negative.

Her acute hospitalization had been complicated by congestive heart failure and pneumonia. Her medications included sulfamethoxazole and trimethoprim, sertraline, nitroglycerin patches, and acetaminophen with caffeine and codeine. At the time of assessment, she complained of low mood, impaired energy, reduced concentration, and poor appetite. On examination, she was alert, cooperative, and in no apparent distress. She was easily distracted by minor visual or auditory stimuli. In midsentence she would become entirely preoccupied with observing her hands or smoothing a ripple in her blanket and had to be redirected back to the interview. She was disoriented to time, but not place or person, and thought that she had been in hospital for a few days when it had actually been a couple of weeks. She could repeat five digits forward, none backward, and could not recall any of three items after 3 minutes. She could not sustain her attention sufficiently to comply with further testing of cognition. Review of her hospital chart revealed excessive daytime napping, alternating with periods of alertness. A provisional diagnosis of delirium was made.

A screening instrument (such as the confusion assessment method, which essentially screens for acute onset and fluctuating course, inattention, disorganized thinking, and altered levels of consciousness) has been found useful in increasing recognition of delirium among hospitalized elderly patients.[15,18]

Delirium can be frightening for patients who misperceive their environment and hallucinate. Specific enquiry into these areas and others can be a very supportive experience for patients. Clinicians must be vigilant to consider the diagnosis, as these patients can feel quite vulnerable and distressed.

Differential diagnosis

Dementia is the most common disorder to consider in the differential diagnosis of patients with delirium. In both conditions, patients have impaired memory and orientation. Patients with dementia are typically alert, in contrast to delirious patients, whose alertness and behaviour fluctuates. It is important to interview family members and review medical records to determine whether a history of cognitive decline was consistent with dementia. A history of any acute onset of symptoms is helpful in distinguishing delirium from dementia. Of course, patients with dementia are more susceptible to delirium.

It is important to educate caregivers that an acute change in function is inconsistent with dementia and needs to be brought to medical attention. When in doubt, err on the side of diagnosing delirium so that appropriate investigations and treatment will be sought.

Other diagnostic considerations for patients with hallucinations, delusions, disoriented thinking, and agitation should include mania, schizophrenia, schizophreniform disorder, and depression. In these conditions, symptoms are persistent and consistent, and delusions tend to be systematic and to occur in a clear sensorium. Symptoms of delirium fluctuate and are more fragmented and associated with impairment in orientation and memory.

Etiology

Advanced age, comorbid medical illness, impaired vision, pre-existing cognitive impairment, and a high serum urea nitrogen–creatinine ratio are risk factors for developing delirium in hospitalized elderly patients.[19]

Delirium can be caused by a multitude of factors, alone or, more typically, in combination. The most common causes of delirium in this population are drug toxicity, infections, metabolic or endocrine disorders, neurologic disorders, and drug or alcohol withdrawal (**Table 2**).

Table 2. Common causes of delirium

DRUGS
Prescription, nonprescription, of abuse
INFECTIONS
Respiratory, urinary
METABOLIC
Electrolyte imbalance, hepatic failure, renal failure, hypoxia
NEUROLOGIC
Stroke, seizures, space-occupying lesions
CARDIORESPIRATORY
Arrhythmia, heart failure, myocardial infarction, respiratory failure
WITHDRAWAL
Drugs, alcohol
ENDOCRINE
Hypothyroidism or hyperthyroidism, hyperglycemia or hypoglycemia, Cushing's syndrome, Addison's disease
ACUTE VASCULAR
Shock, vasculitis, hypertensive encephalopathy
TRAUMA
Head injury, postoperative states, burns

An estimated 30% of all cases of delirium are due to drug toxicity.[20] Drugs commonly causing delirium include anticholinergic medications, sedative-hypnotics, analgesics, histamine H_2 receptor antagonists, digoxin, seizure medications, and steroids. In addition, certain conditions have been associated with the onset of delirium: use of physical restraints, malnutrition, more than three recently added medications, and use of bladder catheters.[7] It is imperative, when the diagnosis is made, that a thorough physical examination, chart review, and appropriate investigations be undertaken.

Management

Once physicians conclude that a patient suffers from delirium, they must develop a clear management plan. Management includes investigation and treatment of underlying causes of delirium and control of the patient's distress and disturbed behaviour. Recommendations for management of delirium are summarized in **Table 3**.

Table 3. Recommendations for managing delirium in elderly patients

• If underlying cause is known or suspected, focus on treatment or elimination of the disorder or factors responsible. Carry out appropriate laboratory workup and consider differential diagnosis.
• Supportive measures include maintaining fluid balance, nutrition, and general comfort. Observe closely with particular regard to changes in vital signs, behaviour, and mental status.
• Provide a quiet, well-lit room with optimal levels of stimulation. A dim night light is often useful. Re-orient patient and provide clocks, calendars, family photos, and other personal possessions.
• Provide education, support, and reassurance to family members. Encourage family members to stay with patient when possible.
• Psychotropic medications should be prescribed only for treatment of specific symptoms or behaviours, eg, aggression, severe agitation, hallucinations, or delusions. Likely side effects must be considered.
• Haloperidol remains the drug of choice for most cases. Starting dose is 0.5 to 1 mg orally or intramuscularly. It may be necessary to repeat every 30 to 60 minutes until adequate sedation is achieved. Higher doses given intravenously are used in some intensive care settings.
• Benzodiazepines with short half-lives, such as lorazepam, are considered drugs of choice for withdrawal syndromes, such as delirium tremens.
• In severe anticholinergic delirium, physostigmine has been used successfully in doses of 1 to 2 mg intravenously or intramuscularly.

Investigations

In institutions, a full review of patient charts requires paying special attention to patients' behaviour; medications, including changes in dosage or recent additions; and results of current laboratory tests (basic tests for delirium are outlined in **Table 4**). It is impossible to give a definitive list of tests that should or should not be done; the choice of tests depends very much on the clinical situation and setting.[19,21] Although electroencephalography is not generally required for diagnosis, electroencephalographic abnormalities virtually always accompany delirium and can help in differentiating

delirium from dementia. Neuroimaging is indicated if there are new focal neurologic findings or if recent head trauma has occurred.

Treatment of underlying causes

If there is evidence of an underlying, untreated cause of delirium, the first approach must focus on treatment or elimination of the disorder or factors responsible. This might require active medical or surgical treatment or discontinuation of drugs. A study of the duration of delirium revealed that, in cases where an electrolyte imbalance was identified and treated, mean duration of delirium was 9.4 days, compared with 25 days in cases without electrolyte imbalance and 25.7 days in patients with uncorrected electrolyte imbalance.[22]

It is important to ensure that fluid balance, nutrition, and general comfort are maintained; that hypoxia is corrected; and that physical examination and bloodwork is repeated regularly. Many patients with delirium are critically ill; therefore, good nursing care is vital. The nursing care plan should include close observation of patients with particular regard to vital signs and changes in behaviour and mental status.

Supportive care

In a paper focusing on the need for more research into delirium, MacDonald et al[23] suggested that advice about general measures to relieve suffering is unsupported by empirical evidence, is frequently self-contradictory or unsound, and is often impractical. Nevertheless, common-sense advice must include instructions to:

- optimize levels of stimulation,
- minimize the unfamiliarity of the environment,
- minimize disorientation, and
- support and educate family members, who are often deeply distressed and disturbed by their relative's condition.[24]

It is generally believed that patients suffering from delirium should be looked after in a well-lit room and provided with optimal levels of stimulation. This can be a problem in intensive care units, which often have a great deal of activity, noise, and visual stimulation day and night. Some clinicians support use of a dim night light. Frequent re-orientation of patients by using clocks, calendars, family photos, and other personal possessions can help. It is important to remember that patients suffering from sensory impairment should be given the opportunity to use their eyeglasses and hearing aids. It is important to speak slowly, carefully, and distinctly to patients. Holding their hands while talking can effectively focus attention while providing reassurance.

Table 4. Suggested laboratory workup for delirium: *Basic tests.*

Blood count with differential
Erythrocyte sedimentation rate
Blood chemistry (electrolytes, serum urea nitrogen, creatinine, glucose, calcium, phosphate, liver function, albumin)
Urinalysis
Chest x-ray examination
Electrocardiogram
Pulse oximetry or arterial blood gas (if indicated)

Although there could be advantages to nursing patients in a private room, this can diminish opportunities for continuous or frequent supervision. Family members should be encouraged to remain with patients when practical. Because of family distress and fear, educating, supporting, and reassuring relatives is most important. Pamphlets about delirium are helpful for some family members.

Meagher et al[25] examined the pattern and frequency of use of environmental strategies in the management of delirium. They investigated the frequency of implementation of eight basic environmental strategies that they considered desirable. Of the eight strategies, only four were used for more than 50% of patients before consultation. They were frequent observation, staff orienting patients, having an uncluttered nursing environment, and using individual night lights.

Pharmacologic management

Case 2. Mrs T, an 83-year-old woman on an orthopedic unit, was referred for psychiatric consultation. She had become markedly disoriented following surgery for a fractured hip 3 days earlier. She was agitated, restless, distractible, and described seeing "blue teddy-bear spiders" that crawled over her bed. She was wakeful at night, calling out for help. During the day, she had been intermittently both aggressive and drowsy. She was being treated for a urinary tract infection. She did not have a psychiatric history. She had been started on haloperidol, 0.5 mg twice daily, which had been increased to 1 mg twice daily. Subsequently, she developed an acute dystonic reaction with severe neck spasm. The haloperidol was

discontinued. The psychiatric consultant suggested she be treated with olanzapine, initially 2.5 mg every night.

Mrs T responded well to this neuroleptic; extrapyramidal symptoms did not recur. Atypical neuroleptics, such as olanzapine, risperidone, and quetiapine could be useful alternatives to haloperidol, although they are not currently available in injectable preparations.

Making decisions. The decision to use psychotropic medication for patients with delirium should be taken only after careful consideration of risks and benefits. Severe agitation, aggression, hallucinations, or delusions, particularly when there is danger to patients or others, are indications for medication.

Empiric data on pharmacologic management of delirium are limited. For most delirious patients, haloperidol is the drug of choice because of its minimal anticholinergic and hypotensive effects.[26,27] Nevertheless, extrapyramidal symptoms, such as acute dystonic reactions, occur frequently with higher potency neuroleptics. For the elderly, a starting dose of 0.5 to 1 mg orally or intramuscularly is appropriate. In cases of severe agitation or aggression, it could be necessary to repeat this dose every 30 to 60 minutes until sedation is achieved. As the delirium remits, the dose of neuroleptics should be gradually reduced over a period of 3 to 5 days.[19]

Use of intravenous haloperidol has been reported in numerous intensive care settings.[28,29] It is noted to be safe and effective; use of high doses (eg, more than 100 mg/d) has been described.[29] Intravenous use of haloperidol, however, has never been approved by government agencies. Intravenous haloperidol has also occasionally been found to lengthen the QT interval, possibly leading to a form of multifocal ventricular tachycardia or ventricular fibrillation.[30] Therefore, haloperidol should be discontinued in patients with a prolonged QT interval.[31]

Surprisingly, only one RCT examined use of tranquilizers for treating delirium. This study by Breitbart and colleagues[32] compared use of haloperidol, chlorpromazine, and lorazepam in hospitalized AIDS patients suffering from delirium. The study found that haloperidol and chlorpromazine were equally effective in improving the symptoms of delirium, but using lorazepam resulted in treatment-limiting adverse effects. Reports of use of the new atypical neuroleptics are beginning to emerge,[33] and a controlled study comparing haloperidol and these agents would be most helpful. Cole et al[34] carried out an RCT of consultation by a geriatric internist or psychiatrist with follow up by a liaison nurse in elderly hospitalized patients with delirium. Despite some improvements in score on a mental status questionnaire and a behaviour rating scale, the authors concluded that the clinical benefits of this intervention were small.

Benzodiazepines with short half-lives, such as lorazepam, are considered the drugs of choice for withdrawal syndromes, such as delirium tremens or withdrawal from benzodiazepines themselves.[26] Benzodiazepines are useful when medication is needed to raise the seizure threshold. Concerns regarding benzodiazepine use include excessive sedation, respiratory depression, behavioural disinhibition, ataxia, and amnesia. These side effects are of particular concern in elderly patients, who are at greater risk for developing these complications. Benzodiazepines are usually contraindicated in hepatic encephalopathy and should be avoided or used with caution in patients with respiratory insufficiency. One study suggests that haloperidol in combination with a benzodiazepine leads to a decreased level of extrapyramidal symptoms as compared with haloperidol alone.[35]

When the cause of delirium is known to be excessive anticholinergic medication, physostigmine has been used in doses of 1 to 2 mg intravenously or intramuscularly.[36,37] Relative contraindications to physostigmine are said to include a history of heart disease, asthma, diabetes, peptic ulcer, and bladder or bowel obstruction.

Use of restraints

Use of restraints in treating patients with delirium is occasionally necessary, but they should be used only in circumstances of extreme aggression or agitation when patients are likely to come to serious physical harm, when behaviour interferes with crucial medical care, or when others are in danger. If restraints are used, the treatment team must monitor their use, any associated complications, and their ongoing necessity. Case reports have documented injuries and death associated with use of restraints.[38] It is recommended that every institution have a policy and protocol for use of restraints. A recent literature review found little evidence that restraints prevent injury and found that restraint-reduction programs do not increase fall or injury rates.[38]

Prevention of delirium

Cole et al[39] reviewed published articles to determine the effectiveness of interventions to prevent delirium in hospitalized patients. Interventions included education, identification of risk factors, and psychiatric or geriatric preoperative consultations. They found 10 controlled trials and calculated the absolute risk reduction for delirium for each study.

They noted that eight of the trials involved surgical patients, two involved elderly medical patients, and most studies had serious methodologic limitations. Based on the results of this review, they concluded that interventions to prevent delirium among surgical patients are modestly effective, but further trials are necessary.

Prognosis

Delirium is associated with higher morbidity and mortality in hospitalized elderly patients. Delirious patients stay in hospital longer and are more likely to die or be institutionalized.[40] A systematic literature review revealed median rates of institutionalization and mortality after 6 months of 36% and 26%, respectively.[41] These findings could be related to other factors that contribute to the development of delirium, such as age, sex, pre-existing cognitive impairment, and severe illness.[42]

The symptoms of delirium, however, are likely more persistent than previously recognized. Only 4% of delirious patients experience complete resolution of all new symptoms of delirium before discharge. Three and 6 months after discharge, all new symptoms have resolved in only about 20% of patients.[43] Finally, although most patients have limited recall of their experiences during episodes of delirium, some subsequently develop posttraumatic stress disorder, have vivid recollection, and sometimes require considerable support following such episodes.[44]

Conclusion

Delirium is frequently underrecognized in clinical practice. Several diagnostic instruments have proven useful in hospitals. The most common causes of delirium in the elderly are drug toxicity, infections, metabolic or endocrine disorders, neurologic disorders, and drug or alcohol withdrawal. Management includes appropriate investigations, treatment of underlying causes, and supportive care. Patients with severe agitation, aggression, or psychotic symptoms sometimes require neuroleptic medication.

Correspondence to: *Dr David Conn, Baycrest Centre for Geriatric Care, 3560 Bathurst St, North York, ON M6A 2E1; telephone (416) 785-2500, extension 2456; fax (416) 785-2450; e-mail* d.conn@utoronto.ca

Editor's key points

- Delirium is frequently underdiagnosed. Consider it whenever an older person has an acute change in behaviour or cognition.
- Delirium comes on more acutely than dementia or other psychiatric conditions, and disturbances in consciousness, memory, or behaviour fluctuate.
- Management includes correctly diagnosing the cause, using supportive measures, and providing re-orientation. Psychotropic medications should be used only for specific symptoms, such as aggression or severe agitation.
- Haloperidol is the drug of choice, initially 0.5 to 1.0 mg by mouth or intramuscularly. Using newer antipsychotics, like olanzapine or risperidone, can reduce some common side effects.

Points de repère du rédacteur

- On omet souvent de diagnostiquer le délire dans la pratique clinique. Il faut l'envisager chez les personnes âgées qui manifestent des changements dramatiques de comportement ou dans leurs facultés cognitives.
- Le délire se déclare de manière plus aiguë que la démence ou d'autres états psychiatriques, et les troubles de la conscience, de la mémoire ou du comportement fluctuent.
- La prise en charge comporte un diagnostic exact de la cause, le recours à des mesures de soutien et l'offre de réorientation. Le recours aux médicaments psychotropes devrait se limiter aux cas de symptômes précis, comme l'agressivité ou une forte agitation.
- L'halopéridol est le médicament d'élection, initialement à raison de 0,5 à 1,0 mg par voie orale ou intramusculaire. Le recours à de nouveaux antipsychotiques, comme l'olanzapine ou le rispéridone, peut atténuer certains effets secondaires courants.

References

1. Levkoff SE, Cleary PD, Liptzin B, Evans DA. Epidemiology of delirium: an overview of research issues and findings. *Int Psychogeriatr* 1991;3:149-67.
2. Liptzin B, Levkoff SE, Cleary PD, Pilgrim DM, Reilly CH, Albert M, et al. An empirical study of diagnostic criteria for delirium. *Am J Psychiatry* 1991;148:454-57.
3. Jitapunkul S, Pillay I, Ebrahim S. Delirium in newly admitted elderly patients: a prospective study. *Q J Med* 1992;83:307-14.
4. Gottlieb GL, Johnson J, Wanich C, Sullivan E. Delirium in the medically ill elderly: operationalizing the DSM-III criteria. *Int Psychogeriatr* 1991;3:181-96.
5. Rockwood K. The occurrence and duration of symptoms in elderly patients with delirium. *J Gerontol* 1993;48:162-6.
6. Naughton BJ, Moran MB, Kadah H, Heman-Ackah Y, Longano J. Delirium and other cognitive impairment in older adults in an emergency department. *Ann Emerg Med* 1995;25:751-5.
7. Inouye SK, Charpentier PA. Precipitating factors for delirium in hospitalized elderly persons. Predictive model and interrelationship with baseline vulnerability. *JAMA* 1996;275:852-7.
8. Folstein MF, Bassett SS, Romanoski AJ, Nestadt G. The epidemiology of delirium in the community: the Eastern Baltimore Mental Health Survey. *Int Psychogeriatr* 1991;3:169-76.

9. Francis J, Martin D, Kapoor WN. A prospective study of delirium in hospitalized elderly. *JAMA* 1990;263:1097-101.
10. Trzepacz PT, Teague GB, Lipowski ZJ. Delirium and other organic mental disorders in a general hospital. *Gen Hosp Psychiatry* 1985;7:101-6.
11. Rockwood K. Acute confusion in elderly medical patients. *J Am Geriatr Soc* 1989;37:150-4.
12. Schor JD, Levkoff SE, Lipsitz LA, Reilly CH, Cleary PD, Rowe JW, et al. Risk factors for delirium in hospitalized elderly. *JAMA* 1992;267:827-31.
13. Erkinjuntii T, Wikstrom J, Palo J, Autio L. Dementia among medical inpatients. *Arch Intern Med* 1986;146:1923-6.
14. American Psychiatric Association. Practice guidelines for the treatment of patients with delirium. *Am J Psychiatry* 1999;156(5 Suppl):1-20.
15. Rockwood K, Cosway S, Stolee P, Kydd D, Carver D, Janett P, et al. Increasing the recognition of delirium in elderly patients. *J Am Geriatr Soc* 1994;42:252-6.
16. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4th ed. Washington, DC: American Psychiatric Association; 1994.
17. Albert MS, Levkoff SE, Reilly CH, Liptzin B, Pilgrim D, Cleary PD, et al. The Delirium Symptom Interview: an interview for the detection of delirium in hospitalized patients. *J Geriatr Psychiatry Neurol* 1992;5:14-21.
18. Inouye SK, VanDyck CH, Alessi CA, Balkin S, Siegal AP, Horwitz RI. Clarifying confusion: the confusion assessment method. *Ann Intern Med* 1990;113:941-8.
19. Inouye SK, Viscoli CM, Horwitz RI, Hurst LD, Tinetti ME. A predictive model for delirium in hospitalized elderly medical patients based on admission characteristics. *Ann Intern Med* 1993;119:474-81.
20. Francis J Jr. Drug-induced delirium and treatment. *CNS Drugs* 1996;5:103-14.
21. Tobias CR, Lippmann S, Tully E, Pary R, Turns DM. Delirium in the elderly: a commonly misunderstood disorder. *Postgrad Med* 1989;85:117-30.
22. Koizumi J, Shiraishi H, Ofuku K, Suzuki T. Duration of delirium shortened by the correction of electrolyte imbalance. *Jpn J Psychiatry Neurol* 1988;42:81-8.
23. MacDonald A, Simpson A, Jenkins D. Delirium in the elderly: a review and a suggestion for a research programme. *Int J Geriatr Psychiatry* 1989;4:311-9.
24. Lindesay J, MacDonald A, Starke I. *Delirium in the elderly*. Oxford, Engl: Oxford University Press; 1990.
25. Meagher DJ, O'Hanlon D, O'Mahony E, Casey PR. The use of environmental strategies and psychotropic medication in the management of delirium. *Br J Psychiatry* 1996;168:512-5.
26. Lipowski ZJ. Delirium (acute confusional states). *JAMA* 1987;258:1789-92.
27. Patkar AA, Kunkel EJ. Treating delirium among elderly patients. *Psychiatr Services* 1997;48:46-8.
28. Sos J, Cassem NH. Managing postoperative agitation. *Drug Ther Bull* 1980;10:103-6.
29. Tesar GE, Murray GB, Cassem NH. Use of high-dose intravenous haloperidol in the treatment of agitated cardiac patients. *J Clin Psychopharmacol* 1985;5:344-7.
30. Sharma N, Rosman H, Padhi D, Tisdale J. Torsades de pointes associated with intravenous haloperidol in critically ill patients. *Am J Cardiol* 1998;81:238-40.
31. Hunt N, Stern T. The association between intravenous haloperidol and torsades de pointes. Three cases and a literature review. *Psychosomatics* 1995;36:541-9.
32. Breitbart W, Marotta R, Platt MM, Weisman H, Derevenco M, Grau C, et al. A double-blind trial of haloperidol, chlorpromazine, and lorazepam in the treatment of delirium in hospitalized AIDS patients. *Am J Psychiatry* 1996;153:231-7.
33. Sipahimalani A, Masand PS. Use of risperidone in delirium: case reports. *Ann Clin Psychiatry* 1997;9:105-7.
34. Cole MG, Primeau FJ, Bailey RF, Bonnycastle MJ, Masciarelli F, Engelsmann F, et al. Systematic intervention for elderly inpatients with delirium: a randomized trial. *Can Med Assoc J* 1994;151:965-70.
35. Menza MA, Murray GB, Holms VF, Rafuls WA. Controlled study of extrapyramidial reactions in the management of delirious, medically ill patients: intravenous haloperidol versus intravenous haloperidol plus benzodiazepines. *Heart Lung* 1988;17:238-41.
36. Greene L. Physostigmine treatment of anticholinergic drug depression in postoperative patients. *Anesth Analg* 1971;50:222-6.
37. Eisendrath S, Goldman B, Douglas J, Dimatteo L, Van Dyke C. Meperidine-induced delirium. *Am J Psychiatry* 1987;144:1062-5.
38. Frank C, Hodgetts G, Puxty J. Safety and efficacy of physical restraints for the elderly. Review of the evidence. *Can Fam Physician* 1996;42:2402-9.
39. Cole MG, Primeau F, McCusker J. Effectiveness of interventions to prevent delirium in hospitalized patients: a systematic review. *Can Med Assoc J* 1996;155:1263-8.
40. Cole MG, Primeau FJ. Prognosis of delirium in elderly hospital patients. *Can Med Assoc J* 1993;149:41-6.
41. Cole MG, Primeau FJ, Élie LM. Delirium: prevention, treatment, and outcome studies. *J Geriatr Psychiatry Neurol* 1998;11:126-37.
42. Levkoff SE, Evans DA, Liptzin B, Cleary PD, Lipsitz LA, Wetle TT, et al. Delirium, the occurrence and persistence of symptoms among elderly hospitalized patients. *Arch Intern Med* 1992;152:334-40.
43. Levkoff SE, Liptzin B, Evans DA, Cleary PD. Progression and resolution of delirium in elderly patients hospitalized for acute care. *Am J Geriatr Psychiatry* 1994;2:230-8.
44. Mackenzie TB, Popkin MK. Stress response syndrome occurring after delirium. *Am J Psychiatry* 1980;137:1433-5.

FOR PRESCRIBING INFORMATION SEE PAGE 175 →